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YOUNG & THOMPSON
745 SOUTH 23RD STREET
2ND FLOOR
ARLINGTON, VA 22202

EXAMINER	
NANO, SARGON N	
ART UNIT	**PAPER NUMBER**
2157	

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/841,097	YOSHIMURA ET AL.	
	Examiner	Art Unit	
	Sargon N. Nano	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *9/1/06*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1- 38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

1. This action is responsive to amendment filed on Sept. 1, 2006. Claims 1 – 38 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 – 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over. Lewis U.S. Patent No. 6,442,169 in view of Ludwig et al. U.S. Patent No. 6,487,218 (referred to as Ludwig).

As to claims 1 and 4, Lewis teaches an internet protocol address assignment system comprising a subscriber terminal, a subscriber exchange, a remote access server, an authentication server and a resource control server, the remote access server being connected to the subscriber exchange using a network node interface, an internet protocol address being assigned to the subscriber terminal using the authentication server and the resource control server (see col. 5 lines 1 - 15, col. 30, lines 45 – 50 and fig.9A Lewis teaches a telecommunication system which include a gateway, an access server , a control server and authentication radius server),

wherein the remote access server receives a call from the subscriber terminal via the subscriber exchange, permits the resource control server to reserve the internet

protocol address during an initial exchange of an initial address message and an address complete message between the subscriber terminal and remote access server before authentication of the subscriber terminal on the basis of information whether or not there is any internet protocol address to be assigned to the subscriber terminal, and assigns the internet protocol address reserved in the resource control server to the subscriber terminal when the subscriber terminal is authenticated (see col.30 , lines 36 - 50 Lewis teaches the reception of a call , the assignment of the internet protocol address and the authentication of that call) .

Lewis teaches the invention as mentioned above. Lewis does not teach the limitation "reserving the internet protocol address before authentication of the subscriber terminal. However Ludwig teaches the IP address assignment before authentication (see Ludwig col. 11 lines 26 – 31, Ludwig discloses that when the authentication fails where an IP address has been already assigned in a peer to peer operation). It would have been obvious to one of the ordinary skill in art at the time of the invention was made to include the step of reserving the IP address before authentication in Lewis's system To make the overall system more efficient. It would be a waste of resources to authenticate a subscriber terminal when in fact an IP address is not currently available.

One of ordinary skill in the art can definitely see the advantage of reserving an IP address (as is known in the art, e.g. reserving resources for QOS etc) prior to allocating valuable network resources to accomplish a task that may not yield proper results.

As to claims 2 and 5, Lewis teaches the internet protocol address assignment system claimed in claim 1, wherein when there is the internet protocol address to be assigned to the subscriber terminal, the resource control server reserves the internet protocol address before authentication of the subscriber terminal, and the remote access server assigns the internet protocol address reserved in the resource control server to the subscriber terminal when the subscriber terminal is authenticated by the authentication server (see col. 39 lines 46 - 50, Lewis teaches the authentication of the call and the assignment of the an IP address).

Lewis fails to teach the limitation "reserving the internet protocol address before authentication of the subscriber terminal. However Ludwig teaches the IP address assignment before authentication (see Ludwig col. 11 lines 26 – 31, Ludwig discloses that when the authentication fails where an IP address has been already assigned in a peer to peer operation). It would have been obvious to one of the ordinary skill in art at the time of the invention was made to include the step of reserving the IP address before authentication in Lewis's system to make the overall system more efficient. It would be a waste of resources to authenticate a subscriber terminal when in fact an IP address is not currently available.One of ordinary skill in the art can definitely see the advantage of reserving an IP address (as is known in the art, e.g. reserving resources for QOS etc) prior to allocating valuable network resources to accomplish a task that may not yield proper results.

As to claim 3, Lewis the internet protocol address assignment system wherein when there is no internet protocol address to be assigned to the subscriber terminal, the

resource control server cannot reserve the internet protocol address, and the remote access server permits the subscriber exchange to release the line before authentication of the subscriber terminal (see col. 29 lines 33 - 40 and fig.5, Lewis teaches the release of the line if a response is not received).

As to claim 6, Lewis teaches the internet protocol address assignment system claimed in claim 4, wherein when there is no internet protocol address to be assigned to the subscriber terminal, the authentication and resource control server cannot reserve the internet protocol address, and the remote access server permits the subscriber exchange to release the line (see fig.5, col. 30, lines Lewis discloses the teardown of a data call ,discontinuing the connection and sending the release message which is transmitted over the ss7 signaling network).

As to claim 7, Lewis teaches the internet protocol address assignment system claimed in claim 1, wherein the authentication server executes the authentication on the basis of a sender number of the subscriber terminal (see fig. 9A, col. 30 lines 36 - 50 Lewis discloses the authentication of the call and the assignment of the IP address by the radius server using the dialed number).

As to claim 8, Lewis teaches the internet protocol address assignment system claimed in claim 2, wherein the authentication server executes the authentication on the basis of a sender number of the subscriber terminal (see fig. 9A, col. 30 lines 36 - 50 Lewis discloses the authentication of the call and the assignment of the IP address by the radius server using the dialed number).

As to claim 9, Lewis teaches the internet protocol address assignment system claimed in claim 3, wherein the authentication server executes the authentication on the basis of a sender number of the subscriber terminal (see fig. 9A, col. 30 lines 36 - 50 Lewis discloses the authentication of the call and the assignment of the IP address by the radius server using the dialed number).

As to claim 10, Lewis teaches the internet protocol address assignment system claimed in claim 4, wherein the authentication and resource control server executes the authentication on the basis of a sender number of the subscriber terminal. (see fig. 9A, col. 30 lines 36 - 50 Lewis discloses the authentication of the call and the assignment of the IP address by the radius server using the dialed number) .

As to claim 11, Lewis teaches the internet protocol address assignment system claimed in claim 5, wherein the authentication and resource control server executes the authentication on the basis of a sender number of the subscriber terminal (see fig. 9A , col. 30 lines 36 - 50 Lewis discloses the authentication of the call and the assignment of the IP address by the radius server) .

As to claim 12, Lewis teaches t he internet protocol address assignment system claimed in claim 6, wherein the authentication and resource control server executes the authentication on the basis of a sender number of the subscriber terminal (see fig. 9A, col. 30 lines 36 - 50 Lewis discloses the authentication of the call and the assignment of the IP address by the radius server).

As to claim 13, Lewis teaches the internet protocol address assignment system claimed in claim 1, wherein the remote access server is connected to the subscriber exchange via a public switched telephone network and a signaling system number 7 signal network (see fig. 5 and col.11 lines 25- 35, Lewis discloses the public switched network and the signaling system number 7 network).

As to claim 14, Lewis teaches the internet protocol address assignment system claimed in claim 2, wherein the remote access server is connected to the subscriber exchange via a public switched telephone network and a signaling system number 7 signal network (see fig. 5 and col.11 lines 25- 35, Lewis discloses the public switched network and the signaling system number 7 network).

As to claim 15, Lewis teaches the internet protocol address assignment system claimed in claim 3, wherein the remote access server is connected to the subscriber exchange via a public switched telephone network and a signaling system number 7 signal network (see fig. 5 and col.11 lines 25- 35, Lewis discloses the public switched network and the signaling system number 7 network).

As to claim 16, Lewis teaches the internet protocol address assignment system claimed in claim 4, wherein the remote access server is connected to the subscriber exchange via a public switched telephone network and a signaling system number 7 signal network (see fig. 5 and col.11 lines 25- 35, Lewis discloses the public switched network and the signaling system number 7 network).

As to claim 17, Lewis teaches the internet protocol address assignment system claimed in claim 5, wherein the remote access server is connected to the subscriber exchange via a public switched telephone network and a signaling system number 7 signal network (see fig. 5 and col.11 lines 25- 35, Lewis discloses the public switched network and the signaling system number 7 network).

As to claim 18, Lewis teaches an internet protocol address assignment system claimed in claim 6, wherein the remote access server is connected to the subscriber exchange via a public switched telephone network and a signaling system number 7 signal network (see fig. 5 and col.11 lines 25- 35, Lewis discloses the public switched network and the signaling system number 7 network).

As to claim 19, Lewis teaches the internet protocol address assignment system claimed in claim 7, wherein the remote access server is connected to the subscriber exchange via a public switched telephone network and a signaling system number 7 signal network (see fig. 5 and col.11 lines 25- 35, Lewis discloses the public switched network and the signaling system number 7 network).

As to claim 20, Lewis teaches a processing method of an internet protocol address assignment system comprising a subscriber terminal, a subscriber exchange, a remote access server, an authentication server and a resource control server, the remote access server being connected to the subscriber exchange using a network node interface, an internet protocol address being assigned to the subscriber terminal using the authentication server and the resource control server, comprising the steps of:

calling from the subscriber terminal to the subscriber exchange (see table 27, col. 30, lines 24 - 37, Lewis discloses the inbound call is connected);

notifying the remote access server of the call from the subscriber terminal to the subscriber exchange (see col. 30, lines 38 - 40, Lewis discloses the message is sent from control tandem to control server);

exchanging an initial address message and an address complete message between the subscriber terminal and remote access server , and during this exchange confirming whether or not there is any Internet protocol address to be assigned to the subscriber terminal by the resource control server (see col.30 lines 40 - 41, Lewis discloses the confirmation by control server then indicates a connection indication to signaling system 7 gateway);

reserving the internet protocol address to be assigned to the subscriber terminal in the resource control server on the basis of the confirmation result of the resource control server (see col.30 lines 40 - 44 Lewis discloses the sending of an answer message over ss7 network);

notifying the remote access server whether or not the resource control server reserves the internet protocol address to be assigned to the subscriber terminal (see col. 30 , lines 44-46 Lewis discloses the verification of the name and the password of the calling party by the server);

authenticating the subscriber terminal by the authentication server; notifying the remote access server of the authentication result of the authentication server see col. 30, lines 36 - 48 Lewis discloses the radius server authenticates the call); and

assigning the internet protocol address reserved in the resource control server to the subscriber terminal when the subscriber terminal is authenticated by the authentication server (see fig. 9A, col. 30 , lines 47 - 50, Lewis discloses the authentication and the assignment of the IP address).

As to claim 21, Lewis teaches the processing method claimed in claim 20, wherein when there is the internet protocol address to be assigned to the subscriber terminal, the resource control server reserves the internet protocol address, and the remote access server assigns the internet protocol address reserved in the resource control server to the subscriber terminal when the subscriber terminal is authenticated by the authentication server (see col. 39 lines 46 - 50, Lewis teaches the authentication of the call and the assignment of the an IP address).

Lewis fails to teach the limitation "reserving the internet protocol address before authentication of the subscriber terminal. However Ludwig teaches the IP address assignment before authentication (see Ludwig col. 11 lines 26 – 31, Ludwig discloses that when the authentication fails where an IP address has been already assigned in a peer to peer operation). It would have been obvious to one of the ordinary skill in art at the time of the invention was made to include the step of reserving the IP address before authentication in Lewis's system to make the overall system more efficient. It would be a waste of resources to authenticate a subscriber terminal when in fact an IP

address is not currently available. One of ordinary skill in the art can definitely see the advantage of reserving an IP address (as is known in the art, e.g. reserving resources for QOS etc) prior to allocating valuable network resources to accomplish a task that may not yield proper results.

As to claim 22, Lewis teaches the processing method claimed in claim 20, wherein when there is no internet protocol address to be assigned to the subscriber terminal, the resource control server notifies the remote access server that the resource control server cannot reserve the internet protocol address, and the remote access server permits the subscriber exchange to release the line (see col. 29 lines 33 - 40 and fig.5, Lewis teaches the release of the line if a response is not received).

Lewis fails to teach the limitation "reserving the internet protocol address before authentication of the subscriber terminal. However Ludwig teaches the IP address assignment before authentication (see Ludwig col. 11 lines 26 – 31, Ludwig discloses that when the authentication fails where an IP address has been already assigned in a peer to peer operation). It would have been obvious to one of the ordinary skill in art at the time of the invention was made to include the step of reserving the IP address before authentication in Lewis's system to make the overall system more efficient. It would be a waste of resources to authenticate a subscriber terminal when in fact an IP address is not currently available. One of ordinary skill in the art can definitely see the advantage of reserving an IP address (as is known in the art, e.g. reserving resources for QOS etc) prior to allocating valuable network resources to accomplish a task that may not yield proper results.

As to claim 23, Lewis teaches a processing method of an internet protocol address assignment system comprising a subscriber terminal, a subscriber exchange, a remote access server, an authentication server and a resource control server, the remote access server being connected to the subscriber exchange using a network node interface, an internet protocol address being assigned to the subscriber terminal using the authentication server and the resource control server, comprising the steps, in order of:

calling from the subscriber terminal to the subscriber exchange (see table 27, col. 30, lines 24 - 37, Lewis discloses the inbound call is connected);

notifying the remote access server of the calling from the subscriber terminal to the subscriber exchange (see col. 30, lines 38 - 40, Lewis discloses the message is sent from control tandem to control server);

exchanging an initial address message and an address complete message between the subscriber terminal and remote access server , and during this exchange confirming whether or not there is any Internet protocol address to be assigned to the subscriber terminal by the resource control server (see col.30 lines 40 - 41, Lewis discloses the confirmation by control server then indicates a connection indication to signaling system 7 gateway);

reserving the internet protocol address to be assigned to the subscriber terminal in the resource control server on the basis of the confirmation result of the resource

control server (see col.30 lines 40 - 44 Lewis discloses the sending of an answer message over ss7 network);

notifying the remote access server whether or not the resource control server reserves the internet protocol address to be assigned to the subscriber terminal (see col. 30 , lines 44-46 Lewis discloses the verification of the name and the password of the calling party by the server);

authenticating the subscriber terminal by the authentication server; notifying the remote access server of the authentication result of the authentication server see col. 30, lines 36 - 48 Lewis discloses the radius server authenticates the call); and

assigning the internet protocol address reserved in the resource control server to the subscriber terminal when the subscriber terminal is authenticated by the authentication server (see fig. 9A, col. 30 , lines 47 - 50, Lewis discloses the authentication and the assignment of the IP address).

As to claim 24, Lewis teaches the processing method claimed in claim 23, wherein when there is the internet protocol address to be assigned to the subscriber terminal, the authentication and resource control server reserves the internet protocol address before authentication of the subscriber terminal, and the remote access server assigns the internet. protocol address reserved in the authentication and resource control server to the subscriber terminal when the subscriber terminal is later authenticated by the authentication and resource control server(see col.30 , lines 36 - 50). Lewis fails to teach the limitation "reserving the internet protocol address before

authentication of the subscriber terminal. However Ludwig teaches the IP address assignment before authentication (see Ludwig col. 11 lines 26 – 31, Ludwig discloses that when the authentication fails where an IP address has been already assigned in a peer to peer operation). It would have been obvious to one of the ordinary skill in art at the time of the invention was made to include the step of reserving the IP address before authentication in Lewis's system to make the overall system more efficient. It would be a waste of resources to authenticate a subscriber terminal when in fact an IP address is not currently available .One of ordinary skill in the art can definitely see the advantage of reserving an IP address (as is known in the art, e.g. reserving resources for QOS etc) prior to allocating valuable network resources to accomplish a task that may not yield proper results.

As to claim 25, Lewis teaches the processing method claimed in claim 23, wherein when there is no internet protocol address to be assigned to the subscriber terminal, the authentication and resource control server notifies the remote access server that the authentication and resource control server cannot reserve the internet protocol address, and the remote access server permits the subscriber exchange to release the line before authentication of the subscriber terminal (see col. 29 lines 33 - 40 and fig.5). Lewis fails to teach the limitation "reserving the internet protocol address before authentication of the subscriber terminal. However Ludwig teaches the IP address assignment before authentication (see Ludwig col. 11 lines 26 – 31, Ludwig discloses that when the authentication fails where an IP address has been already assigned in a peer to peer operation). It would have been obvious to one of the

ordinary skill in art at the time of the invention was made to include the step of reserving the IP address before authentication in Lewis's system to make the overall system more efficient. It would be a waste of resources to authenticate a subscriber terminal when in fact an IP address is not currently available. One of ordinary skill in the art can definitely see the advantage of reserving an IP address (as is known in the art, e.g. reserving resources for QOS etc) prior to allocating valuable network resources to accomplish a task that may not yield proper results.

As to claim 26, Lewis teaches the processing method claimed in claim 20, wherein the authentication server executes the authentication on the basis of a sender number of the subscriber terminal (see fig. 9A, col. 30 lines 36 – 50).

As to claim 27, Lewis teaches the processing method claimed in claim 21, wherein the authentication server executes the authentication on the basis of a sender number of the subscriber terminal (see fig. 9A, col. 30 lines 36 – 50).

As to claim 28, Lewis teaches the processing method claimed in claim 22, wherein the authentication server executes the authentication on the basis of a sender number of the subscriber terminal (see col. 30 lines 36 – 50).

As to claim 29, Lewis teaches the processing method claimed in claim 23, wherein the authentication and resource control server executes the authentication on the basis of a sender number of the subscriber terminal (see col. 30 lines 36 – 50).

As to claim 30, Lewis teaches the processing method claimed in claim 24, wherein the authentication and resource control server executes the authentication on

the basis of a sender number of the subscriber terminal (see fig. 9A, col. 30 lines 36 – 50).

As to claim 31, Lewis teaches the processing method claimed in claim 25, wherein the authentication and resource control server executes the authentication on the basis of a sender number of the subscriber terminal (see fig. 9A, col. 30 lines 36 – 50).

As to claim 32, Lewis teaches the processing method of claim 20, wherein the remote access server is connected to the subscriber exchange via a public switched telephone network and a signalling system number 7 signal network (see col.11 lines 25- 35).

As to claim 33, Lewis teaches the processing method of claim 21, wherein the remote access server is connected to the subscriber exchange via a public switched telephone network and a signalling system number 7 signal network (see col.11 lines 25- 35).

As to claim 34, Lewis teaches the processing method of claim 22, wherein the remote access server is connected to the subscriber exchange via a public switched telephone network and a signalling system number 7 signal network (see fig. 5 and col.11 lines 25- 35).

As to claim 35, Lewis teaches the processing method of claim 23, wherein the remote access server is connected to the subscriber exchange via a public switched telephone network and a signalling system number 7 signal network (see fig. 5 and col.11 lines 25- 35).

As to claim 35, Lewis teaches the processing method of claim 24, wherein the remote access server is connected to the subscriber exchange via a public switched telephone network and a signalling system number 7 signal network (see fig. 5 and col.11 lines 25- 35).

As to claim 37, Lewis teaches the processing method of claim 25, wherein the remote access server is connected to the subscriber exchange via a public switched telephone network and a signalling system number 7 signal network (see fig. 5 and col.11 lines 25- 35).

As to claim 38, the processing method of claim 26, wherein the remote access server is connected to the subscriber exchange via a public switched telephone network and a signalling system number 7 signal network (see fig. 5 and col.11 lines 25- 35).

Response to Arguments

3. Applicant's arguments have been fully considered but they are not persuasive. In summary applicant argues in the remarks that A) Ludwig does not disclose or suggest assigning an IP address before authentication during the initial exchange of an initial address message (IAM) and an address complete message (ACM) between the subscriber terminal and remote access server .

In response to A) Ludwig teaches that during an initial exchange the terminal transmits a message to the server however it is never received as it is temporary buffered or stored , instead during the initial exchange and the initial address message (IAM) and the address complete message (ACM) are utilized prior to allocating the IP

address. Subsequently authorization is performed and if authorization fails the assigned IP address will be de- allocated and the link is terminated (see Ludwig col.11 lines 16 – 31 and figs 4 - 8).**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sargon N. Nano whose telephone number is (571) 272-4007. The examiner can normally be reached on 8 hour.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sargon Nano
Nov. 17, 2006

ARIO ETIENNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY